ON Semiconductor®

Bill of Materials for the NCP1247USBPDGEVB Evaluation Board

Designator	Quantity	Description	Value	Tolerance	Footprint	Manufacturer	Manufacturer Part Number	Substitution Allowed	Lead Free
B100	1	GENERAL INSTRUMENT RECTIFIER	-	-	GBU4S	Various	Various	Yes	Yes
C1	1	CAPACITOR, European symbol	1u0	-	C0805	Various	Various	Yes	Yes
C2	1	CAPACITOR, European symbol	560u	-	C0805	Various	Various	Yes	Yes
C3	0	DNP	-	-	-	-	-	Yes	Yes
C4	0	DNP	-	-	-	-	-	Yes	Yes
C5	1	CAPACITOR, European symbol	10u/35V	-	C1206	Various	Various	Yes	Yes
C6	1	CAPACITOR, European symbol	10u/35V	-	C1206	Various	Various	Yes	Yes
C7	1	CAPACITOR, European symbol	10u/35V	-	C1206	Various	Various	Yes	Yes
C8	1	CAPACITOR, European symbol	100n	-	C0805	Various	Various	Yes	Yes
C9	1	CAPACITOR, European symbol	22n	-	C0805	Various	Various	Yes	Yes
C10	1	CAPACITOR, European symbol	22n	-	C0805	Various	Various	Yes	Yes
C11	0	DNP	-	-	-	-	-	Yes	Yes
C12	1	CAPACITOR, European symbol	10u/35V	-	C1206	Various	Various	Yes	Yes
C13	1	CAPACITOR, European symbol	1n5	-	C0805	Various	Various	Yes	Yes
C14	1	CAPACITOR, European symbol	100n	-	C0805	Various	Various	Yes	Yes
C15	1	CAPACITOR, European symbol	100n	-	C0805	Various	Various	Yes	Yes
C16	1	CAPACITOR, European symbol	330p	-	C0805	Various	Various	Yes	Yes
C17	1	CAPACITOR, European symbol	1n0	-	C0805	Various	Various	Yes	Yes
C18	1	CAPACITOR, European symbol	330n	-	C0805	Various	Various	Yes	Yes
C19	1	CAPACITOR, European symbol	100n	-	C0805	Various	Various	Yes	Yes
C20	1	CAPACITOR, European symbol	1u/35V	-	C0805	Various	Various	Yes	Yes
C21	1	CAPACITOR, European symbol	100n	-	C0805	Various	Various	Yes	Yes
C22	1	CAPACITOR, European symbol	1u/35V	-	C0805	Various	Various	Yes	Yes
C23	1	CAPACITOR, European symbol	1u	-	C0805	Various	Various	Yes	Yes
C24	1	CAPACITOR, European symbol	100n	-	C0805	Various	Various	Yes	Yes
C25	1	CAPACITOR, European symbol	100n	-	C0805	Various	Various	Yes	Yes
C26	1	CAPACITOR, European symbol	1u	-	C0805	Various	Various	Yes	Yes
C100	1	POLARIZED CAPACITOR, European symbol	47u/50V	-	E2.5-6	Various	Various	Yes	Yes
C101	1	CAPACITOR, European symbol	1n0/500V	-	C050-035X075	Various	Various	Yes	Yes
C102	1	POLARIZED CAPACITOR, European symbol	470u/25V	-	E5-10.5	Various	Various	Yes	Yes
C103	1	CAPACITOR, European symbol	5n6/500V	-	C075-032X103	Various	Various	Yes	Yes
C104	1	POLARIZED CAPACITOR, European symbol	470u/25V	-	E5-10.5	Various	Various	Yes	Yes
C105	1	POLARIZED CAPACITOR, European symbol	470u/25V	-	E5-10.5	Various	Various	Yes	Yes
C106	1	POLARIZED CAPACITOR, European symbol	470u/25V	-	E5-10.5	Various	Various	Yes	Yes
CB100	1	CAPACITOR	100uF/400V	-	RCL_2_CAP_18X31.5_SW	Various	Various	Yes	Yes
CX100	1	X CAPACITOR	100n	-	XC1588	Various	Various	Yes	Yes
CX101	1	X CAPACITOR	100n	-	XC1588	Various	Various	Yes	Yes
CY100	1	Y CAPACITOR	1n0	-	YC1084	Various	Various	Yes	Yes
CY101	1	X CAPACITOR	2u2	-	XC1085	Various	Various	Yes	Yes
CY102	1	X CAPACITOR	2u2	-	XC1085	Various	Various	Yes	Yes
D1	1	MMSD4148	MMSD4148	-	SOD123/8-1	On Semiconductor	MMSD4148	NO	Yes
D2	1	DIODE	MRA4007	-	SMA	On Semiconductor	MRA4007	NO	Yes
D3	1	DIODE	MRA4007	-	SMA	On Semiconductor	MRA4007	NO	Yes
D4	1	MRA4007T3G	MRA4007T3G	-	SMA	On Semiconductor	MRA4007T3G	NO	Yes
D5	1	MRA4007T3G	MRA4007T3G	-	SMA	On Semiconductor	MRA4007T3G	NO	Yes
D6	0	DNP	-	-	-	-	-	Yes	Yes
D7	1	MMSD4148	MMSD4148	-	SOD123/8-1	On Semiconductor	MMSD4148	NO	Yes
D8	1	Z-Diode	MMSZ15	-	SOD123	On Semiconductor	MMSZ15	NO	Yes
D9	1	Silicon Schottky Diodes	MMBD3307LG	-	SOT23	On Semiconductor	MMBD3307LG	NO	Yes
D10	1	MURA160	MURA160	-	SMA	On Semiconductor	MURA160	NO	Yes
D100	1	DIODE	NTST30100	-	TO220AVH	On Semiconductor	NTST30100	NO	Yes
D101	1	DIODE	1N4007	-	DO41-.3L	On Semiconductor	1N4007	NO	Yes
F100	1	Fuse	2.0A T	-	TR5	Various	Various	Yes	Yes
IC1	1	SMPS Controller	NCP1247B65	-	SO-08	On Semiconductor	NCP1247B65	NO	Yes
IC2	1	CYPD1132-16SXI	CYPD1132-16SXI	-	SOIC16	Cypress	CYPD1132-16SXI	NO	Yes
IC3	1	NCP716MX30TBG	NCP716MX30TBG	-	WDFN8 2X2	On Semiconductor	NCP716MX30TBG	NO	Yes
IC4	1	2-input AND gate	NL17SG08	-	SC70-5	On Semiconductor	NL17SG08	NO	Yes
IC100	1	Voltage reference	NCP431	-	TO92	On Semiconductor	NCP431	NO	Yes
IC101	0	DNP	-	-	-	-	-	Yes	Yes
L100	1	Common Mode Choke		-	B82734W	EPCOS	B82734W	Yes	Yes
L101	1	Inductor	1u0	-	DR0810	Various	Various	Yes	Yes
L102	1	Inductor	744 841 330	-	WE_INDUCT_45/100	Various	Various	Yes	Yes
NTC	1	Inductor	330k	-	P640	Various	Various	Yes	Yes
OK1	1	SHARP OPTO COUPLER	PC817SMD	-	DIL4-SMD	Various	Various	Yes	Yes
OK2	1	SHARP OPTO COUPLER	PC817SMD	-	DIL4-SMD	Various	Various	Yes	Yes
Q1	1	N-CHANNEL MOS FET	MGSF1N03LT1G	-	SOT23	On Semiconductor	MGSF1N03LT1G	NO	Yes
Q2	1	N-CHANNEL MOS FET	MGSF1N03LT1G	-	SOT23	On Semiconductor	MGSF1N03LT1G	NO	Yes
Q3	1	N-CHANNEL MOS FET	MGSF1N03LT1G	-	SOT23	On Semiconductor	MGSF1N03LT1G	NO	Yes
Q4	1	Fet Single	DMG7401SFG	-	POWERDI3333	Diodes Incorporated	DMG7401SFG	Yes	Yes
Q5	1	N-CHANNEL MOS FET	BSS138L	-	SOT23	On Semiconductor	BSS138L	NO	Yes
Q6	1	N-CHANNEL MOS FET	BSS138L	-	SOT23	On Semiconductor	BSS138L	NO	Yes
Q7	1	N-CHANNEL MOS FET	BSS123	-	SOT23	On Semiconductor	BSS123	NO	Yes
Q8	1	N-CHANNEL MOS FET	BSS138L	-	SOT23	On Semiconductor	BSS138L	NO	Yes
Q100	1	N-CHANNEL MOS FET	SPP11N60C3	-	TO220BVH	Infineon Tech.	SPP11N60C3	Yes	Yes
R1	1	RESISTOR, European symbol	10k	-	R0805	Various	Various	Yes	Yes
R2	1	RESISTOR, European symbol	22R	-	R0805	Various	Various	Yes	Yes
R3	1	RESISTOR, European symbol	2R2	-	R0805	Various	Various	Yes	Yes
R4	1	RESISTOR, European symbol	100k	-	R0805	Various	Various	Yes	Yes
R5	0	DNP	-	-	-	-	-	Yes	Yes
R6	1	RESISTOR, European symbol	56k2	-	R0805	Various	Various	Yes	Yes
R7	1	RESISTOR, European symbol	1R3	-	R1206	Various	Various	Yes	Yes
R8	1	RESISTOR, European symbol	4k7	-	R0805	Various	Various	Yes	Yes
R9	1	RESISTOR, European symbol	1k0	-	R0805	Various	Various	Yes	Yes
R10	1	RESISTOR, European symbol	1R3	-	R1206	Various	Various	Yes	Yes
R11	1	RESISTOR, European symbol	R010	1%	R1210	Various	Various	Yes	Yes
R12	1	RESISTOR, European symbol	160k	1%	R0805	Various	Various	Yes	Yes
R13	0	DNP	-	-	-	-	-	Yes	Yes
R14	1	RESISTOR, European symbol	1R3	-	R1206	Various	Various	Yes	Yes
R15	0	DNP	-	-	-	-	-	Yes	Yes
R16	1	RESISTOR, European symbol	100R	1%	R0805	Various	Various	Yes	Yes
R17	1	RESISTOR, European symbol	10k	-	R0805	Various	Various	Yes	Yes
R18	1	RESISTOR, European symbol	1R3	-	R1206	Various	Various	Yes	Yes
R19	1	RESISTOR, European symbol	100k	-	R0805	Various	Various	Yes	Yes
R20	0	DNP	-	-	-	-	-	Yes	Yes
R21	1	RESISTOR, European symbol	820	-	R0805	Various	Various	Yes	Yes
R22	0	DNP	-	-	-	-	-	Yes	Yes
R23	0	DNP	-	-	-	-	-	Yes	Yes
R24	1	RESISTOR, European symbol	2k7	-	R1206	Various	Various	Yes	Yes
R25	1	RESISTOR, European symbol	18k2 1%	1%	R0805	Various	Various	Yes	Yes
R26	1	RESISTOR, European symbol	105k	1%	R0805	Various	Various	Yes	Yes
R27	1	RESISTOR, European symbol	0R0	-	R0805	Various	Various	Yes	Yes
R28	1	RESISTOR, European symbol	2k7	-	R1206	Various	Various	Yes	Yes
R29	1	RESISTOR, European symbol	53k6	1%	R0805	Various	Various	Yes	Yes
R30	0	DNP	-	-	-	-	-	Yes	Yes
R31	0	DNP	-	-	-	-	-	Yes	Yes
R32	0	DNP	-	-	-	-	-	Yes	Yes
R33	1	RESISTOR, European symbol	8k06	1%	R0805	Various	Various	Yes	Yes
R34	0	DNP	-	-	-	-	-	Yes	Yes
R35	1	RESISTOR, European symbol	100k	-	R0805	Various	Various	Yes	Yes
R36	1	RESISTOR, European symbol	100k	-	R0805	Various	Various	Yes	Yes
R37	1	RESISTOR, European symbol	100k	1%	R0805	Various	Various	Yes	Yes
R38	1	RESISTOR, European symbol	267	1%	R0805	Various	Various	Yes	Yes
R39	1	RESISTOR, European symbol	10k0	1%	R0805	Various	Various	Yes	Yes
R40	1	RESISTOR, European symbol	15k0	1%	R0805	Various	Various	Yes	Yes
R41	1	RESISTOR, European symbol	57k	1%	R0805	Various	Various	Yes	Yes
R42	1	RESISTOR, European symbol	4k7	-	R0805	Various	Various	Yes	Yes
R43	1	RESISTOR, European symbol	22R	-	R0805	Various	Various	Yes	Yes
R44	1	RESISTOR, European symbol	100k	-	R0805	Various	Various	Yes	Yes
R45	1	RESISTOR, European symbol	2145	1%	R0805	Various	Various	Yes	Yes
R46	1	RESISTOR, European symbol	33k	-	R0805	Various	Various	Yes	Yes
R47	1	RESISTOR, European symbol	2R2	-	R0805	Various	Various	Yes	Yes
R48	1	RESISTOR, European symbol	4k3	1%	R0805	Various	Various	Yes	Yes
R49	1	RESISTOR, European symbol	100k	-	R0805	Various	Various	Yes	Yes
R50	1	RESISTOR, European symbol	1k0	-	R0805	Various	Various	Yes	Yes
R51	1	RESISTOR, European symbol	0R0	-	R0805	Various	Various	Yes	Yes
R100	1	RESISTOR, European symbol	4M7	-	0414/15	Various	Various	Yes	Yes
R101	1	RESISTOR, European symbol	2R2	-	0207/10	Various	Various	Yes	Yes
R102	1	RESISTOR, European symbol	100	-	0411/12	Various	Various	Yes	Yes
R103	1	RESISTOR, European symbol	15R	-	0207/10	Various	Various	Yes	Yes
R104	1	RESISTOR, European symbol	330k	-	0207/10	Various	Various	Yes	Yes
R105	1	RESISTOR, European symbol	330k	-	0207/10	Various	Various	Yes	Yes
R106	1	VARISTOR	B72210P2301K101	-	S07K275	EPCOS	B72210P2301K101	Yes	Yes
R107	0	DNP	-	-	-	-	-	Yes	Yes
SR_VCC	1	SOLDER PAD drill 1.0 mm, distributor Buerklin. 12H555	LSP10	-	LSP10	Various	Various	Yes	Yes
TR100	1	CoilCraft Flyback Transformer KA5037-AL	KA5038-BL	-	KA5037-AL	KA5038-BL	CoilCraft	Yes	Yes
X100	1	WAGO SCREW CLAMP	-	-	W237-103	Various	237-103	Yes	Yes
X101	1	100 (2.54mm) Center Header - 5 Pin'	22-23-2051	-	22-23-2051	MOLEX	22-23-2051	Yes	Yes
X102	1	WAGO SCREW CLAMP	-	-	W237-103	Various	237-103	Yes	Yes